

Guide to the Secure Sheep and Wool Supply (SSWS) Plan



SSWS
SECURE SHEEP
AND WOOL SUPPLY

www.securesheepwool.org

ASI



The Secure Sheep and Wool Supply Plan was made possible through funding from the American Sheep Industry (ASI) Association and the United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS).

WHAT IS THE SECURE SHEEP AND WOOL SUPPLY PLAN?

The Secure Sheep and Wool Supply Plan is a continuity of business plan for sheep operations affected by movement restrictions during a foot and mouth disease (FMD) outbreak in the United States. One strategy for controlling the spread of FMD involves stopping movement of animals (sheep, goats, cattle, and pigs) and animal products (semen, embryos, wool, manure) in the areas around infected animals. Once stopped, restarting movement will require a special permit issued by regulatory officials after a producer meets certain requirements. The SSWS Plan provides opportunities to voluntarily prepare before an outbreak to limit exposure of sheep and prepare to meet movement requirements.

FOOT AND MOUTH DISEASE (FMD)

FMD is a very contagious animal disease that causes blisters on the feet and in the mouths of cloven-hooved animals (sheep, goats, cattle, and pigs). It does NOT affect public health or food safety. Meat and milk are safe to eat and drink.

More FMD information is available at seuresheepwool.org and FMDinfo.org.

HOW CAN I PREPARE?

Producers can prepare now by:

- Having a national Premises Identification Number (PIN) issued by the office of the State Animal Health Official
- Writing an operation-specific enhanced biosecurity plan that can be implemented during an outbreak
- Developing contingency plans for periods of restricted movement
- Keeping movement records of animals, people, equipment, and other items on and off your operation
- Learning about how FMD affects sheep and be able to record observations

Find resources for the above on the Secure Sheep and Wool Supply website: seuresheepwool.org.

PREMISES IDENTIFICATION NUMBER (Prem ID or PIN)

WHAT IS A PREMISES IDENTIFICATION NUMBER (PIN)?

- A PIN is a nationally unique code that is permanently assigned to a single physical location where animals are housed or graze. A PIN is required to order “840” electronic ID tags and to request a movement permit during an FMD outbreak. More information is available at: securesheepwool.org/Assets/SSWS_Premises-ID-Info.pdf.

HOW DO I GET A PIN?

- A PIN can be requested from the office of your State Animal Health Official (SAHO).
- Visit: aphis.usda.gov/aphis/ourfocus/animalhealth/traceability/state-pin.

HOW DO I KNOW WHAT TYPE OF PREMISES IDENTIFICATION I HAVE?

- As a sheep producer, you may already have several different identification numbers, each with a different and important purpose. Contact your SAHO (State Veterinarian), call 1-886-USDA-TAG, or contact the USDA APHIS Veterinary Services Office in your state to determine what type of premises identification you have or may need.

CAN ONE PIN BE USED FOR ANIMALS OWNED BY THE SAME PERSON, BUT HOUSED IN MULTIPLE LOCATIONS?

- PINs serve as a method of locating animals in a Control Area during an outbreak and are also included on movement permits. The PIN must reflect the actual location of the animals (latitude, longitude). If you have multiple or adjoining locations with sheep, contact your SAHO or USDA APHIS Veterinary Services Office in your state for guidance on how many PINs may be needed.

WHY IS A PIN IMPORTANT DURING A FOREIGN ANIMAL DISEASE OUTBREAK?

- PINs allow animal health officials to quickly and precisely identify where animals are located in the event of an animal health emergency like an FMD outbreak. PINs speed up communication and response during an outbreak. PINs are an important part of traceability during an FMD outbreak, which is critical to outbreak management as well as regaining trade status for sheep and their products.



ENHANCED BIOSECURITY: PROTECTING THE FLOCK

Existing biosecurity plans may offer protection against endemic diseases like Johne's Disease or campylobacteriosis. FMD virus is highly contagious and requires heightened biosecurity measures. These are described in the Self-Assessment Checklist for Enhanced Biosecurity for FMD Prevention available at securesheepwool.org. During an FMD outbreak, the producer's responsibility is to keep their animals from becoming infected, focusing on what they can control on their premises. There are three major concepts that all sheep operations should implement before an FMD outbreak in the U.S.:

1. A Biosecurity Manager,
2. A written operation-specific enhanced biosecurity plan, and
3. A line of separation (LOS).

WHAT DOES A BIOSECURITY MANAGER DO?

They develop the operation-specific enhanced biosecurity plan with the assistance of a veterinarian (if they are not a veterinarian). They also train others and ensure biosecurity steps are followed. Be prepared to share your biosecurity plan with your State Animal Health Official before an outbreak (if requested). Biosecurity checklists, plan templates, training videos, signs, and posters are available at securesheepwool.org.

[NAME OF OPERATION] Enhanced Biosecurity Plan for FMD Prevention in [STATE]

Updated: [DATE CREATED OR UPDATED]

This Enhanced Biosecurity Plan is based on the Secure Sheep and Wool Supply (SSWS) Plan Self-Assessment Checklist for Enhanced Biosecurity, [SHEEP FEEDLOTS APRIL 2020 OR SHEEP ON PASTURE/RANGELAND APRIL 2020] and was developed using guidance from the SSWS Information Manual for Enhanced Biosecurity for FMD Prevention: Sheep Feedlots or Sheep on Pasture/Rangeland. All documents are available at www.securesheepwool.org. In the plan below, all items are implemented unless marked except those indicated which will be implemented prior to requesting an animal movement permit.

SCOPE OF BIOSECURITY PLAN

Describe the Premises:

- National Premises Identification Number (Prem ID or PIN): [PIN] (request from the office of the State Animal Health Official)
- Premises Address: [A VALID 911 ADDRESS WHERE ANIMALS RESIDE]
- Premises GPS Coordinates: [LATITUDE, LONGITUDE OF ENTRANCE TO LIVESTOCK AREA]
- Animals* on primary premises: [ALL SPECIES] and [AVERAGE OR RANGE OF NUMBER OF ANIMALS]
- Animal housing types: [E.G. BUILDINGS, PASTURES, DRY LOTS]
- Other business operations on premises? [YES OR NO]
- If yes, what? [E.G. VEGETABLE STAND, SALE OF FEED, FERTILIZER, OR COMPOST; HOSTING FARM TOURS; RETAIL STORE]
- Secondary premises** locations: [LIST THE PINs, 911 ADDRESSES, OR GPS COORDINATES (LATITUDE, LONGITUDE) WHERE ANIMALS ASSOCIATED WITH THIS OPERATION RESIDE (E.G., AFFILIATED FEEDLOTS, PASTURES)]
 - Will be provided if this premises is located in an FMD Control Area

*Animals that are susceptible to FMD include cattle, pigs, sheep and goats. For biosecurity guidance for beef cattle, dairy cattle, and pigs, see www.securesheepwool.org, www.secureporksupply.org, and www.securepork.org.

**Work with your State Animal Health Official to determine if separate PINs are needed for all of your associated premises.

1. BIOSECURITY MANAGER AND WRITTEN PLAN

The designated Biosecurity Manager for this premises and their contact information is:

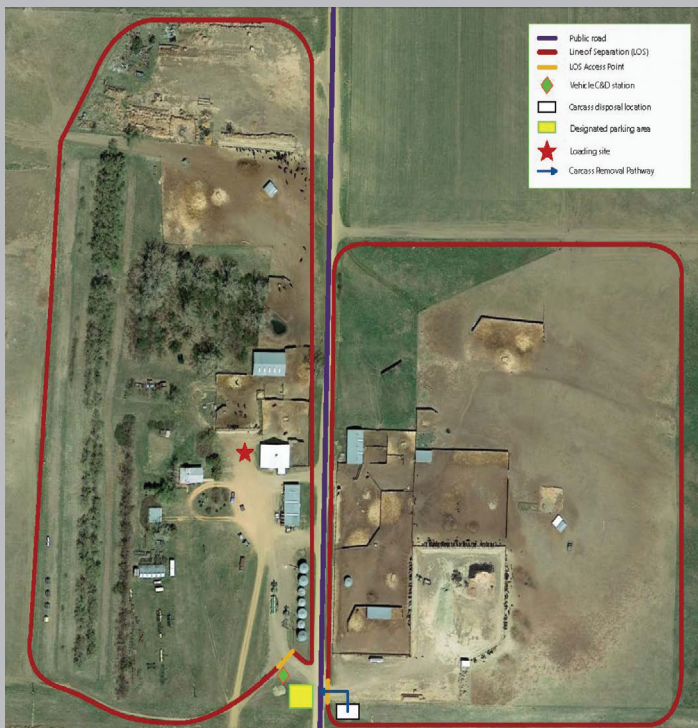
NAME:
PHONE: [XXX-XXX-XXXX]
EMAIL: [EMAIL ADDRESS]

In the event the Biosecurity Manager is away from the operation, their designee's contact information is:

NAME:
PHONE: [XXX-XXX-XXXX]
EMAIL: [EMAIL ADDRESS]

The Biosecurity Manager's contact information is posted [DESCRIBE WHERE LOCATED].

CREATING A PREMISES MAP

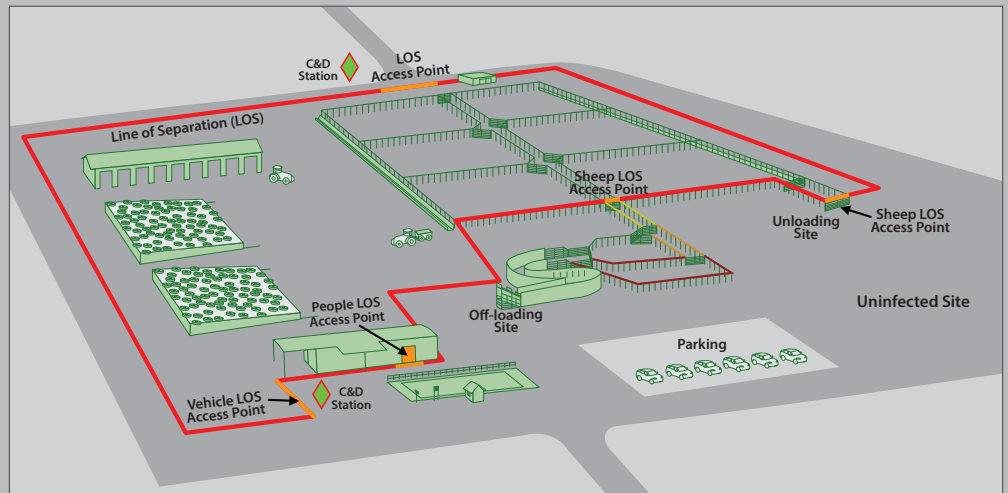


The biosecurity plan should include a map of the operation indicating the

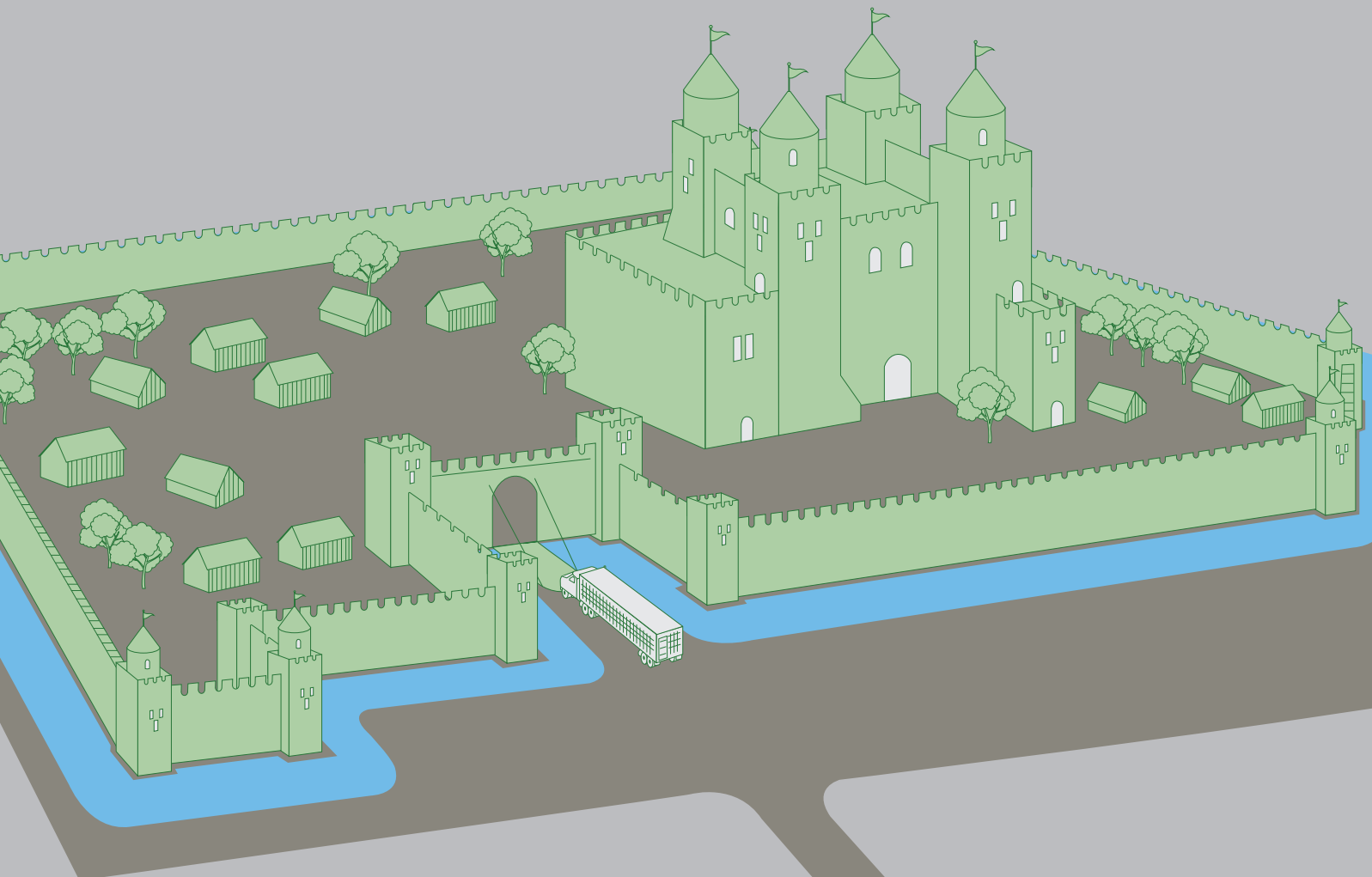
- Line of Separation (LOS)
- LOS Access Point(s) for animal, people, and vehicle entry
- Cleaning and disinfection (C&D) station(s)
- Designated parking area
- Carcass movement pathways and disposal location(s)

LINE OF SEPARATION (LOS)

The biosecurity guidance includes implementing an LOS to prevent movement of the FMD virus to areas where animals may be exposed. The LOS is a clearly identified boundary to separate off-farm from on-farm movements, as shown by the RED LINE in the graphic. In an outbreak, animals, people, or items only cross the LOS through clearly marked and controlled LOS access point(s) following appropriate biosecurity steps.



One way to visualize the LOS concept is to think of your operation as a castle and the LOS as the moat. The drawbridge is the access point, controlled by the operation.



BIOSECURITY FOR SHEEP GRAZING PUBLIC LANDS

There are unique factors regarding public land grazing which pose serious FMD virus exposure threats to some of the largest sheep flocks in North America. In an FMD outbreak, public land grazers need to be aware of the exposure risks and implement strict, enhanced biosecurity procedures wherever possible to protect the flock. Exposure risks include common-use roads, corrals, trails, and wildlife interactions. Steps to protect the flock include maximizing distance between grazing flocks and herds, limiting who contacts the flock, reporting dead wildlife and wildlife interactions to regulatory officials. For more information, visit seuresheepwool.org.



At the beginning of an FMD outbreak, it may take several days or weeks for the livestock industry, state and federal officials to understand the extent of the outbreak and have confidence that animals with no evidence of infection can move without spreading FMD. Visit securesheepwool.org for a Contingency Planning document that addresses preparing for potential movements, financial risk management, communication, and managing inputs and outputs during the time of restricted movement.

FMD virus can spread on contaminated vehicles, equipment, even people's clothing and footwear. In an outbreak, producers may be asked by Regulatory Officials to provide accurate trace-back information to identify potential FMD virus exposure. A practice questionnaire, available at securesheepwool.org, provides a short example of the type of information that may be requested by Regulatory Officials managing the FMD outbreak.

[illegible]

DISEASE MONITORING

Disease monitoring (also known as surveillance) of animals for FMD involves close observation. Producers will need to demonstrate their sheep have no evidence of infection to request a movement permit in an outbreak. Producers are encouraged to designate one or more people who usually look at the sheep and can recognize when something is “off” or sheep are sick. There are resources available on secursheepwool.org to learn how to find disease early. There are also record-keeping logs available to track health observations if the operation does not already have a system in place.



OBSERVE!

Learn how to recognize when animals look “off” or are sick due to FMD.



RECORD!

Keep records of your observations.



REPORT!

Develop a communication plan so everyone knows how to report abnormal findings during an outbreak.

FOOT-AND-MOUTH DISEASE IN SHEEP

PROGRESSION OF LESIONS

Foot-and-mouth disease (FMD) lesions may be mild or not apparent in adult sheep but can also be severe like in cattle or pigs. Vesicles, ulcers, and erosions in and around the coronary band, mouth, and nose may be seen. These lesions cause clinical signs like lameness. Fever and reduced feed intake can happen in sheep infected with FMD. Infected young lambs sometimes die suddenly due to disease. The following lesion ages are approximate.

| | CORONARY BAND | DENTAL PAD, TONGUE | NASAL MUCOSA |
|-------------------------|---|---|--|
| EARLY LESION (1-5 DAYS) | Blanching of the coronary band | Focal erosion of the dental pad and tongue | Focal erosion of the nasal mucosa |
| LATE LESION (6-7 DAYS) | Erosion of the coronary band with fibrin deposition | Multifocal healing erosions on the dental pad | Erosion on the nasal mucosa with fibrin deposition |

If you suspect a Foreign Animal Disease
Call your State Animal Health Official (SAHO) or Area Veterinarian-in-Charge (AVIC) to report your concerns. If you have access to the contact information of the SAHO or the AVIC at your location, you can call 1-888-536-7593, 12 office of the AVIC for your state. You can also call the USDA APHIS Veterinary Services National Center for Animal Emergency Management at 800-940-6524 (24 hours) for assistance.

Photo Credit: USDA APHIS Foreign Animal Disease Diagnostic Laboratory and the U.S. Department of Homeland Security ARS AFIS Visual Information Service at Plum Island Animal Disease Center.

USDA United States Department of Agriculture **FSI** **The Center for Food Safety and Public Health**

FOOT AND MOUTH DISEASE CAN LOOK LIKE MANY THINGS

| | |
|--|---|
| FEVER (>104°F, >40°C) ¹ | BLISTERS IN MOUTH OR ON TONGUE ² |
| LAMENESS ³ | RED OR WHITE ABOVE THE HOOF ² |
| SUDDEN DEATH IN LAMBS ⁴ | EATING LESS OR OFF FEED ¹ |

SEE SOMETHING, SAY SOMETHING

State Veterinarian Phone # _____

Photo credits: 1. Iowa State University 2. Plum Island Animal Disease Center 3. National Animal Disease Information Service 4. iStockphoto.com




WOOL HANDLING DURING A FMD OUTBREAK

Wool and wool handling equipment can act as a fomite to spread the FMD virus unless properly handled. There is guidance from the World Organization for Animal Health (OIE) to inactivate FMD virus present in wool and hair for industrial use. One option is to clean the wool and equipment before storing it in waterproof plastic. Store bales/bags in a biosecure area for a specific number of days/weeks/months depending on the temperature.

Traceability of wool bales/bags is also critical during an FMD outbreak. Every bale/bag within a shipment should be uniquely identified so that it can be traced back to the flock of origin. The identification method should be established before an outbreak. Wool bales/bags should be transported in clean vehicles that follow OIE sanitary guidelines.

Infected wool should be disposed of by burial or composting that meet local and state regulations. For more information, visit securesheepwool.org.

Wool Handling During a Foot and Mouth Disease (FMD) Outbreak



Virus Survival

How long can FMD virus survive in wool?

- FMD virus (FMDV) is more stable at lower temperatures, in organic matter such as manure or dirt, and when protected from sunlight.
- Reported survival times are approximately two months at 39°F (4°C). Survival time decreases with higher temperatures.
- There are no USDA-approved tests for detection of FMDV in wool (as of March 2021).

Storage

How can FMD virus be killed in wool?

- Clean the wool and equipment to remove contamination.
- Bale/bag wool in waterproof plastic and clean the outside of each bale/bag.
- Store bales/bags in a biosecure area for **at least** the time and temperatures listed. Keep accurate records of bale/bag identification, storage times and temperatures:
 - 39.2°F (4°C) for four months, or
 - 64.4°F (18°C) for four weeks, or
 - 98.6°F (37°C) for eight days.

Traceability

Why is traceability of wool bales/bags so important?




- Bales/bags should be uniquely identified and the wool not sorted or re-baled.
- Accurate, complete records of wool movements are critical to manage an FMD outbreak.
- It is possible that FMDV-infected sheep could be shorn and their wool stored or moved before the flock is diagnosed.

Disposal

If wool cannot be moved in an outbreak, what are some disposal options?

- Burial or composting small amounts.
- Burning/incineration requires high temperatures and may not be publicly acceptable.
- All options must meet local and state environmental regulations.

The Secure Sheep and Wool Supply Plan is funded by the American Sheep Industry Association.

securesheepwool.org

FREQUENTLY ASKED QUESTIONS

1. WHAT IS THE BENEFIT OF THE SSWS PLAN?

The benefit is realized in an FMD outbreak when healthy animals are permitted to be moved to the packer or the next production stage. The SSWS Plan provides resources to help sheep producers prepare ahead of time rather than during the chaos of an outbreak.

2. IF THE UNITED STATES HASN'T HAD A CASE OF FMD SINCE 1929, WHY DO WE NEED TO SPEND TIME AND EFFORT PREPARING NOW?

There is always a risk of FMD being introduced into the United States due to extensive international trade and travel. This highly contagious livestock disease is present in about two-thirds of the countries in the world. If introduced into U.S. livestock, exports of sheep, goats, cattle, pigs, and their products will stop. Research suggests that a U.S. outbreak could result in \$15 to \$100 billion losses. The American Sheep Industry (ASI) Association and USDA value preparedness and funded the Secure Sheep and Wool Supply plan to help producers prepare.

3. HOW MUCH DOES IT COST TO PREPARE AS RECOMMENDED IN THE SSWS PLAN?

The cost varies depending on your level of preparedness. Preparedness is similar to insurance. There is a cost investment relative to the assets that need protection. It is hard to put an exact dollar value on it, but preparing before an outbreak could be a great investment.

- Requesting a premises identification number (PIN) is free.
- Putting all of the biosecurity measures in place to keep FMD off a premises can be expensive. However, writing an enhanced biosecurity plan ahead of time costs very little.
- Free resources for training employees about biosecurity and surveillance are available at securesheepwool.org.

4. WHAT MEASURES IN THE SSWS PLAN WILL BE REQUIRED BY MY PACKER, STATE, OR THE FEDERAL GOVERNMENT?

The SSWS Plan provides guidance only and opportunities to voluntarily prepare before an FMD outbreak. Each state can determine what guidance to use. Contact your State Animal Health Official to discuss what might be required in an outbreak.

5. MY SHEEP GET SHIPPED TO ANOTHER STATE. DO ALL STATES FOLLOW THE SSWS PLAN?

The SSWS Plan was developed nationally, and each state can determine what guidance to use. Contact your State Animal Health Official to discuss your animal movement needs and learn what might be required in an outbreak.

6. DO THE BIOSECURITY MEASURES NEED TO BE AUDITED?

Some states are conducting audits or pre-certification before an FMD outbreak. This may involve visiting the premises, reviewing the enhanced biosecurity plan, and discussing animal movement on and off the premises. Contact your State Animal Health Official to ask if auditing or pre-certification is being done.

7. ARE THERE SECURE FOOD SUPPLY PLANS FOR OTHER LIVESTOCK?

Yes, there are Secure Food Supply plans for swine, dairy cattle, and beef cattle. The Secure Pork, Milk, Beef, and Sheep and Wool Supply Plans were developed together, so recommendations are similar with species-specific differences where needed. More information is available on the websites: securepork.org, securemilk.org, and securebeef.org.



8. WHO IS A REGULATORY OFFICIAL?

Regulatory officials are local, state, tribal and federal officials who have the authority and responsibility to respond to foreign animal disease outbreaks.

9. WHERE CAN I GET MORE INFORMATION ABOUT FMD?

- FMD affects cloven-hooved animals, such as sheep, goats, cattle, and pigs.
- FMD is not public health or food safety concern.
- Meat and milk are safe to eat and drink.
- More information is available at secursheepwool.org, FMDinfo.org, and at cfsph.iastate.edu.

10. WHY AREN'T ANIMALS VACCINATED NOW FOR FMD BEFORE AN OUTBREAK?

- Effective FMD vaccines exist, but they are strain-specific (most strains require their own vaccine and do not cross-protect against infection from other strains, also known as subtypes).
- There are many different strains of FMD circulating globally, and it is hard to predict with certainty which ones might enter the United States.
- Vaccinating for FMD has international trade repercussions, which would limit the ability of the United States to export sheep.
- Watch the 8-minute FMD Vaccination video at secursheepwool.org for more information.



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The Center for
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This booklet was created by the Center
for Food Security and Public Health
at Iowa State University.